REMARKS/ARGUMENTS

Request for Continued Examination:

The applicant respectfully requests continued examination of the above-indicated application as per 37 CFR 1.114.

Amendments to the Claims

Claims 1, 10, and 16 have been amended to more clearly define the claimed decoding module. As shown in Fig. 7 and stated in paragraph [0033]: "The set 205 of decoding modules comprises a plurality of decoding modules, most of which are each capable of providing multiple functions during decoding," the applicant therefore believes that the amendments made to claims 1, 10, and 16 have no new matter introduced.

Claims 21-23 are newly entered, and include limitations fully supported by specification paragraph [0036] of applicant's disclosure. No new matter is introduced.

Claim 24 is newly entered, and includes limitations corresponding to that recited in claim 5. In addition, this claimed feature is also supported by Fig. 7 and pertinent description in the specification of applicant's disclosure. No new matter is introduced.

Claims 9, 13, and 20 have been amended to more clearly define that the necessary lookup table for the VOP type to be decoded is transmitted from the switching circuit to the decoding module on demand. This is fully supported by specification paragraph [0037] of applicant's disclosure. No new matter is introduced.

Claim Rejections – 35 USC 102

Claim 1 is rejected under 35 U.S.C. 102(a) as being anticipated by Sekiguchi et al. (US 6493385 B1).

Response:

Examiner states that applicant's claimed decoding module is anticipated due to Sekiguchi's teaching disclosing that the decoding is carried by the decoder in Fig. 30 corresponding to MB type. The applicant respectfully disagrees.

In specification paragraph [0033], the applicant states, "the set 205 of decoding

modules comprises a plurality of decoding modules, most of which are each capable of providing multiple functions during decoding". Therefore, a plurality of different VOP types can be decoded using the same decoding module; additionally, a decoded result including a plurality of parameters is generated. Taking the decoding module 230 shown in Fig. 7 of applicant's disclosure for example, it performs various functions provided by the prior art decoding modules 20, 72, and 116 used for decoding combined VOPs (I-VOPs, P-VOPs, and B-VOPs that are not Data-partitioned VOPs) and Data-partitioned I-VOPs and P-VOPs respectively (see paragraphs [0007], [0008], [0012], [0013], and [0015] of applicant's disclosure for details). Therefore, the limitation "at least one decoding module capable of decoding a predetermined signal in **each** of the predetermined plurality of **different** VOP types" as claimed in claim 1 is directed to above feature of using the same decoding module to decode different VOP types. The applicant asserts that this claimed feature is not anticipated by the cited prior art.

Regarding Sekiguchi's teaching, one of the MBTYPE tables stored in the decoding units 117 and 118 is selected by the change-over unit 116 according to the MBTYPE table information set in the coded bit stream (Fig. 30; col. 24, lines 56). After one of the MBTYPE table is selected due to the received MBTYPE table information, Sekiguchi discloses using the coding mode information to determine which coding mode in the selected MBTYPE table is used for the bit stream coding, and then the determined coding mode is referenced to determine **which decoding unit** should be used for decoding the bit stream (Figs. 34-Fig. 35; col. 24, line 62 – col. 27, line 48). In short, Sekiguchi discloses selecting one of the MBTYPE tables using the MBYTE table selection information, using an MBTYPE decoding unit having the selected MBYTE table stored therein to determine a coding mode according to the coding mode selection information, and performing decoding upon the bit stream (e.g., performing a VOP decoding) through selecting adequate decoding units (e.g., decoding unit 117) in response to the determined coding mode (col. 28, lines 41-51). Note is made by the applicant that Sekiguchi's decoder will select different decoding units for VOP decoding when the coding mode of the bit stream varies. Thus

Sekiguchi fails to teach that a plurality of different VOP types supported by the decoder are decoded using the same decoding module comprised in the decoder.

In light of above arguments, the applicant asserts that the claimed decoding module capable of decoding a predetermined signal in each of the predetermined plurality of **different VOP types** is not anticipated by Sekiguchi. (*emphasis added*) Reconsideration of claim 1 is respectfully requested.

Claim Rejections – 35 USC 103

Claims 2-4, 7-9, and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi et al. (US 6493385 B1).

Response:

Claims 2-4 and 7-8

Claims 2-4 and 7-8 are dependent upon claim 1, and should be allowed if claim 1 is found allowable.

Claim 9

Claim 9 has been amended to define that the lookup table is transmitted from the switching circuit to the decoding module only when the decoding module does need the lookup table. The applicant asserts this claimed feature pertinent to transmitting the lookup table on demand is neither taught not suggested by the cited prior art.

In col. 23, lines 19-23, Sekiguchi teaches that the MBTYPE tables stored in the MBTYPE decoding units 117 and 118 have contents shown in Fig. 9 and Fig. 10. In other words, Sekiguchi teaches that a complete table including entries of all supported coding modes is stored in the corresponding MBTYPE decoding unit. Therefore, Sekiguchi fails to teach or suggest the claimed feature "**the predetermined lookup table** specifically corresponding to the VOP type the decoding module is to decode is **transmitted** from the switching circuit to the decoding module **only when the decoding module requires the predetermined lookup table to complete the decoding of the VOP type**". (*emphasis added*) Claim 9 should be found patentable over the cited prior art.

In addition, claim 9 is dependent upon claim 1, and should be allowed if claim 1 is

found allowable.

Claim 16

In light of above statements under Claim 1, the applicant asserts that the claimed feature "providing a decoding module capable of decoding a predetermined signal in the **different types** of VOP (*emphasis added*)" is neither taught nor suggested by Sekiguchi. Claim 16 should be found patentable over the cited prior art.

Claims 17-19

As claims 17-19 are dependent upon claim 16, claims 17-19 should be allowed if claim 16 is found allowable.

Claim 20

In light of above statements under Claim 9, the applicant asserts that the claimed feature "**transmitting the corresponding lookup table** of the type of VOP the decoding module is to decode from the switching circuit to the decoding module **only when the decoding module requires the predetermined lookup table to complete the decoding of the VOP type**" is neither taught nor suggested by Sekiguchi. Claim 20 therefore should be found patentable over the cited prior art.

In addition, claim 20 is dependent upon claim 16, and should be allowed if claim 16 is found allowable.

Claims 5, 6, and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sekiguchi et al. (US 6493385 B1) as applied to claims 1-4, 7-9, and 16-20 above, and further in view of Chen (US 6043838 A).

Response:

Claim 10

In the reply dated 05/25/2007, arguments were provided by the applicant to point out that the claimed multiplexer is neither taught nor suggested by Chen. For clarity, the text is given as below:

"As shown in Fig. 1 and stated in col. 5, lines 52-59, Chen teaches using the temporal remultiplexer (140) to **combine** outputs of the enhancement decoder (130) and the lower decoder (135). Therefore, the cited temporal remultiplexer is used to combine a plurality of inputs into a single output, instead of selecting one of the inputs as the output. However, in claim 10, the claimed multiplexer is connected to a memory and the claimed switching circuit is connected to the multiplexer for controlling **which decoded result** is transmitted to the memory (*emphasis added*)."

Referring to above arguments, the applicant respectively points out that even thought Chen's temporal remultiplexer is applied to Sekiguchi's decoding apparatus, the modified decoding apparatus fails to teach the claimed multiplexer in applicant's decoding device. In short, the claimed multiplexer is neither taught nor suggested by the combined teaching of Sekiguchi and Chen.

Additionally, in light of above statements under Claim 1, the cited decoding apparatus of Sekiguchi fails to teach or suggest that a plurality of different VOP types can be decoded using the same decoding unit. Therefore, the applicant asserts the claimed feature " **each video decoding module** capable of decoding a predetermined signal in a **Data-partitioned intra video object plane (DP-I VOP)** and capable of decoding the predetermined signal in a **Data partitioned predicted video object plane (DP-P VOP)**" is neither taught nor suggested by Sekiguchi's disclosure.

In short, all of the limitations in claim 10 are not taught or suggested by Sekiguchi in view of Chen. Reconsideration of claim 10 is respectfully requested.

Claims 5 and 6

Referring to above statements, the temporal remultiplexer taught by Chen is different from a multiplexer generally known to those skilled in the pertinent art. Therefore, as claims 5 and 6 includes limitations directed to the claimed multiplexer, claims 5 and 6 should be found patentable over the combined teaching of Sekiguchi and Chen.

In addition, claims 5 and 6 are dependent upon claim 1, and should be allowed if claim 1 is found allowable.

Claims 11-12 and 14-15

Claims 11-12 and 14-15 are dependent upon claim 10, and should be allowed if claim 10 is found allowable.

Claim 13

In light of above statements under Claim 9, the applicant asserts that the claimed feature "**the predetermined lookup table** specifically corresponding to the VOP type the decoding module is to decode is **transmitted** from the switching circuit to the decoding module **only when the decoding module requires the predetermined lookup table to complete the decoding of the VOP type**" is neither taught nor suggested by Sekiguchi in view of Chen. Claim 13 therefore should be found patentable over the cited prior art.

In addition, claim 13 is dependent upon claim 10, and should be allowed if claim 10 is found allowable.

Patentability of New Claims 21-24

Claims 21-23

As stated above, the claimed decoding module capable of decoding a plurality of different VOP types is neither taught nor suggested by the cited prior art, alone or in combination. In addition, as stated in the specification paragraph [0036], lookup table information is needed for a specific decoding function corresponding multiple VOP types supported by the claimed decoding module. The applicant therefore asserts that the claimed features of the decoding module storing a lookup table including lookup table information corresponding to the different VOP types are not taught or suggested by the cited prior art, alone or in combination. Thus, claims 21-23 should be found patentable over the cited prior art. In addition, claims 21-23 are dependent upon claims 1, 10, and 16 respectively, and should be allowed if claims 1, 10, and 16 are found allowable.

Claim 24

Referring to above statements, the temporal remultiplexer taught by Chen is

different from a multiplexer generally known to those skilled in the pertinent art. Therefore, the applicant asserts that the claimed limitation "**multiplexing** an output of the decoding module to **selectively output the decoded result to a memory** for further processing" is not taught by Sekiguchi and Chen, alone or in combination. (*emphasis added*)

In addition, claim 24 is dependent upon claim 16, and should be allowed if claim 16 is found allowable.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

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Sincerely yours,

Winston Hsu Date: 10.05.2007

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Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)